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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,365	10/24/2005	Karim Zaghib	0055676-000011	2328

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BUCHANAN, INGERSOLL & ROONEY PC
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EXAMINER

ENIN-OKUT, EDU E

ART UNIT	PAPER NUMBER
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1795

NOTIFICATION DATE	DELIVERY MODE
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09/17/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No. 10/521,365	Applicant(s) ZAGHIB ET AL.	
	Examiner Edu E. Enin-Okut	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 105211 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-76 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-49 and 62-69, drawn to a mixture of particles and the process of preparing the mixture.

Group II, claims 50 and 70-71, drawn to a cathode.

Group III, claims 51 and 72-73, drawn to an anode.

Group IV, claims 52-57, 61 and 74-75, drawn to an electrochemical generator.

Group V, claims 58-60 and 76, drawn to a supercapacitor. (It is noted that, in claims 58-60 and 76, Applicant has recited “supercapacity” rather than supercapacitor.)

2. The inventions listed as Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical features shared by Groups I-V is a mixture of particles as recited in claim 1. This limitation is taught by Kaneda et al., U.S. Patent No. 6,638,662 (see the reasons below.) Therefore, the shared technical feature cannot be special technical feature because it is known in the prior art. Unity of invention is lacking and restriction is proper.

Regarding claim 1, Kaneda discloses a mixture of particles comprising a non-conducting or semi-conducting nucleus [metal or metal oxide] (Abstract; 3:65-67, 4:37-44), the nuclei of said particles being

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at least partially covered with a hybrid conductor coating [coating containing crystalline and amorphous graphite] (Abstract; 2:19-28, 3:24-28, 4:1-4, 4:62-5:2) and said particles being at least partially connected through hybrid conducting chains which provide a network of electrical conductivity (Abstract; 3:24-28, 4:19-38, 4:58-5:14).

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

If Group I is selected, a further species election is required. Applicant must make a selection from Category A and from Category B below.

Category A:

Species A1, drawn to a mixture of particles with a non-conducting nucleus (reads on claim 14);
or,

Species A2, drawn to a mixture of particles with a semi-conducting nucleus (reads on claim 13).

Category B:

Species B1, drawn to a mixture of particles where the particles comprise a coating of a carbon-metal hybrid mixture (reads on claim 21); or,

Species B2, drawn to a mixture of particles where the particles comprise a coating of at least two different conducting forms of carbon (reads on claims 22-34).

If Species A1 is elected, a further species election is required:

Species A1(a), drawn to a mixture of particles with a non-conducting nucleus consisting of glasses; or,

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Species A1(b), drawn to a mixture of particles with a non-conducting nucleus consisting of mica;
or,

Species A1(c), drawn to a mixture of particles with a non-conducting nucleus consisting of SiO₂.

If Species A2 is elected, a further species election is required:

Species A2(a), drawn to a mixture of particles with a semi-conducting nucleus consisting of Si or doped Si; or,

Species A2(b), drawn to a mixture of particles with a semi-conducting nucleus consisting of Ge;
or,

Species A3(c), drawn to a mixture of particles with a semi-conducting nucleus consisting of Ge and InSb.

If Species B2 is elected, a further species election is required:

Species B2(a), drawn to a mixture containing a low crystallinity carbon (reads on claims 23-24, 28-29, and 33-34).; or,

Species B2(b), drawn to a mixture containing a high crystallinity carbon (reads on claims 25-27, 30-32).

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

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The following claim(s) are generic: 1-12 and 15-20.

4. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: See the discussion in Paragraph 2 above.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Correspondence / Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Edu E. Enin-Okut** whose telephone number is **571-270-3075**. The examiner can normally be reached on Monday-Thursday, 8 a.m. - 4 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Susy Tsang-Foster can be reached on 571-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer

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Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edu E Enin-Okut/
Examiner, Art Unit 1795

/SUSY N TSANG-FOSTER/
Supervisory Patent Examiner, Art Unit 1795